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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/900,989

Filing Date: July 09, 2001

Appellant(s): PRICE ET AL.

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Scott M. Simmonds  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 2, 2007 appealing from the Office action mailed October 17, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

This case was transferred from Examiner Reagan to current Examiner Zelaskiewicz. The current Examiner would like to point out a typographical error. The Office Action filed October 17, 2005 states claims 22-48 are rejected under 35 U.S.C. 103(a). The statement of rejection fails to include claims 49-54; however, said claims are included in the 35 U.S.C. 103 rejection. The statement of rejection should state that claims 22-54 are rejected under 35 U.S.C. 103(a). Appellant's Appeal Brief acknowledges that all claims (i.e. 22-54) are rejected in the Office Action.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relyed Upon**

6,097,995	TIPTON ET AL.	8-2000
5,699,525	EMBUTSU ET AL.	12-1997

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 22-42 and 49-52 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tipton et al. (US 6,097,995) in view of Embutsu et al. (US 5,699,525).**

**Claims 22-28, 39:**

Tipton discloses a waste management and disposal system, inflow and outflow of regulated chemical waste to a plurality of stations (see at least column 3, lines 1-33), utilization of computer networks and database systems (see at least Figures 5a and 5b), and report generation (see at least Figures 67-69 and associated text): Tipton, in at least column 39, line 53+ also discloses SQL searching and reports. The Structured Query Language (SQL) is a system for utilizing a database to search for and retrieve records

that match search criteria (see at least column 40, line 58 to column 41, line 9). Tipton does not specifically disclose a matching mechanism within the database structure. Embutsu, however, in at least Figures 4 and 5 as well as associated text discloses, "The computer 37 or the database of the auxiliary memory unit 39 is organized to match the locations of collection on the geographic location which is displayed on the display unit 11. The extracted collection targets are highlighted in different colors on the displayed map so that the distribution of home electric appliances to be collected is easily visible." It would have been obvious to combine the existing waste management systems as taught by Tipton and add the teachings to include the functionality of database matching techniques as shown by Embutsu because the resultant system would solve the problem of efficiently and cost-effectively matching waste producer with waste manager, improving upon the existing matching system of Tipton by more closely matching according to pre-selected criteria.

**Claim 29:**

Tipton includes legislative and regulatory information (see at least column 2, lines 2-3).

**Claims 30 and 31:**

Tipton discloses monitoring inflows and outflows (see at least column 3, lines 1-9), inherently disclosing a sensing device. Scheduling/rescheduling of waste removal is an obvious outcome and benefit of constant monitoring.

**Claims 32 and 33:**

Tipton discloses using computer network and database functionality as shown above. Tipton does not specifically disclose profile criteria. Embutsu, however, in at least column 6, lines 43-59 does. It would be obvious to one of ordinary skill in the art at the time of the invention to utilize the flexibility and efficiency of a database system described by Tipton and add the profiling criteria as disclosed by Embutsu to match waste producer with waste disposal vendors to efficiently dispose of waste products.

**Claims 34 and 35:**

Tipton discloses monitoring inflows and outflows (see at least column 3, lines 1-9), inherently disclosing a sensing device. Scheduling/rescheduling of waste removal is an obvious outcome and benefit of constant monitoring.

**Claim 36:**

Tipton's use of databases as disclosed above inherently discloses storage of waste processing data.

**Claims 37 and 38:**

Tipton discloses report generation as shown above. Generation of financial reports would be an obvious and necessary inclusion.

**Claims 40-42:**

The combination of Tipton/Embutsu as shown above discloses the waste management matching system as claimed by the Applicant. Tipton/Embutsu also disclose setting specific criteria for properly matching producer with vendor in order to efficiently manage and dispose of harmful waste products. Although this system inherently discloses evaluation of a vendor's capabilities, and the requirements of the waste producing facility, the combination does not specifically address the step of evaluating or reevaluating the vendors: However, it would have been obvious to one of ordinary skill in the waste disposal arts at the time of the invention to include in the profile matching step the set of criteria that apply to adequately matching processing requirements with disposal capabilities and updating these criteria necessary or required. In addition, practices which reduce waste products while increasing profitability by reducing cost are old and well-known factors in matching consumer with vendor, and the Examiner takes Official Notice of this long standing relationship. Reducing pollutants reduces cost and increases profits. In addition, Tipton discloses regulatory standards as shown above, inherently disclosing the necessity for constant evaluation and reevaluation of vendor capabilities.

**Claims 49-52:**

The combination of Tipton/Embutsu as shown above discloses the waste management matching system as claimed by the Applicant. Tipton/Embutsu do not specifically disclose the waste components include at least one of hazardous waste, industrial waste, refuse, recyclable plastics, and recyclable cardboard. However, Examiner takes Official Notice that it is old and well known in the waste management that waste commonly consists of hazardous waste, industrial waste, refuse, recyclable plastics, and recyclable cardboard, among other things. For this reason, it would be obvious to one of ordinary skill in the waste management arts to conceive of hazardous Waste, industrial waste, refuse, recyclable plastics, and recyclable cardboard.

**(10) Response to Argument**

Tipton, in view of Embutsu, discloses all the limitations of independent claim 22, which corresponds with independent claim 39. See Table 1 below.

**TABLE 1**

<b>Claim 22</b>	<b>Tipton</b>	<b>Embutsu</b>
a computer storage medium	A user controlled chemical management system for use with a computer (abstract)	*An information management apparatus (abstract, figure 2)

waste management data associated with a plurality of vendors having waste management capabilities and providing waste management services	disposal stations (C3 L1-33, C18 L64-67, C19 L1-19)	*Waste collecting agents (C5 L22-41, C6 L43-60)
entity profile data associated with a plurality of waste producing entities having waste processing requirements and producing waste components	receiving stations (C3 L1-33, C18 L64-67, C19 L1-19)	*Input data (C5 L42-47 and 66-67, C6 L1-33 and 43-60)
a first computer system configured to access the computer storage medium and stored waste management data and entity profile data	SQL servers (C19 L65-67, C20 L1-40)	*The collection method determination means 50 determines an efficient collection method based on this information (C5 L6-21 and 42-67, figure 4-5)
a first computer system further configured to associate a set of vendors from the plurality of vendors to provide waste management service for the waste producing entity		The collection method determination means 50 determines an efficient collection method based on this information (C5 L6-21 and 42-67, figure 4-5)

\*These limitations were not cited or relied upon in the Office Action, but Examiner notes that Embutsu nevertheless teaches them.

Group A: claims 22 and 49-50

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) the proposed combination does not arrive at the invention (Appeal Brief p 5-9).

First, Appellant argues that the Examiner has not put forth a legally sufficient teaching, motivation, or suggestion in support of the proposed combination of Tipton and Embutsu (Appeal Brief p 5-6).

Examiner disagrees. "It would have been obvious to combine the existing waste management systems as taught by Tipton and add the teachings to include the functionality of database matching techniques as shown by Embutsu because the resultant system would solve the problem of efficiently and cost-effectively matching waste producer with waste manager, improving upon the existing matching system of Tipton by more closely matching according to pre-selected criteria" (Office Action p 3).

Furthermore, a need exists for "a comprehensive system to allow institutions the ability to address the full range of hazardous material/chemical management essential today and in the future. Providing this capability helps minimize the amount of hazardous material produced, improves management practices, provides an additional layer of protection to emergency response personnel, provides an international component needed by present institutions working in the international arena, helps train the people to use the system, and educates the individual users regarding safe handling and storage procedures that meet or exceed present regulatory standards" (Tipton C2 L21-33). Additionally, "increasing federal, state, and local environmental/health regulations pose an overwhelming information management problem which, if not addressed, could result in debilitating fines and possible crippling financial liability to the institution" (Tipton C2 L42-52). A need exists for assessment of the quantity of waste generated in the future, so as to project long-term prospect of waste supply (Embutsu C1 L48-67).

A "matching mechanism" within the database structure would help institutions better address their needs by 1) minimizing hazardous material produced; 2) improving management practices; 3) providing better protection to emergency personnel; 4) training system users; 5) satisfying regulatory standards, which may prevent future fines and financial liability; and 6) providing a projection for future purposes.

Examiner notes that a teaching or motivation to combine the references does not necessarily have to originate from the references themselves, as Appellant erroneously argues (Appeal Brief p 6). See KSR International v. Teleflex, Inc., 82 USPQ2d 1385 (U.S. 2007).

Second, Appellant argues that a combination of Tipton and Embutsu does not arrive at the invention of claims 22 and 49-50 (Appeal Brief p 8-9).

Examiner disagrees. See Table 1 above. Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tipton to show associating a set of vendors from the plurality of vendors to provide waste management services for the waste producing entity because Tipton already teaches a plurality of receiving and disposal stations throughout an institution, and monitoring of inflow and outflow of chemicals (i.e. waste) (C3 L1-33, C18 L64-67, C19 L1-19). A suggestion exists to associate a receiving station with a specific disposal station because of the handling requirements of said disposal station (e.g. disposal station A is better equipped to handle the volume from receiving station A than disposal station B is).

Group B: claims 23-24, 32 and 27-29

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach the input of any data associated with processing of waste components produced by the waste producing entity (Appeal Brief p 10-11).

Examiner disagrees. Please see argument above under "Group A." Additionally, Tipton discloses the chemical management system has an input device (e.g. keyboard) so that the user (waste producing entity) may input data (C2 L61-67, C14 L41-55, C35 L7-15).

Group C: claims 25, 34-35, 39-42 and 51-52

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach the creation of waste processing service orders or service requests by a waste producing entity (Appeal Brief p 11-12).

Examiner disagrees. Please see argument above under "Group A." Additionally, Tipton discloses the user (waste producing entity) clicking on a button, menu, menu item, list, field, or object to make an action occur (e.g. create service order or request) (C21 L29-61); and the user clicking on the transfer command line (service order) (C43 L58-67, C44 L1-50). Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tipton to show a waste producing entity creating a waste processing service order or request because Tipton already teaches monitoring of chemicals throughout a system at various inflow and outflow stations (C2 L61-67, C3 L1-65). A suggestion exists to have the waste producing entity create a service order because said service order provides vital data for determining appropriate inflow and outflow stations (e.g. volume requirements).

Group D: claims 26 and 33

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach any comparison or analysis with regard to vendors for waste management service for the waste producing entity (Appeal Brief p 13-14).

Examiner disagrees. Please see argument above under "Group A." Furthermore, Tipton discloses multiple outflow stations (vendors for waste management service) with varying capabilities, and varying levels of structure at multiple divisions and departments (C2 L61-67, C3 L1-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tipton to show comparing multiple outflow stations because each station may have a unique structure equipped to handle certain chemicals, and analysis will show which station is best suited for an order request.

Additionally, Embutsu teaches a collection method determination means 50 that determines (analysis) an efficient collection method based on the waste collecting agents' transportation means (e.g. capacity of trucks, number of trucks) (C5 L6-67, figure 4-5).

Group E: claims 30-31

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach a sensor located at the waste producing entity, and said sensor monitoring a waste component and generating monitoring data indicating when the waste producing entity requires waste management service (Appeal Brief p 14-17).

Examiner disagrees. Please see argument above under "Group A." Additionally, Tipton discloses a user (sensor) inserting expiration dates for chemicals, and activating dialogue windows and alarms (monitoring and generating monitoring data) upon the chemical changing states or becoming unusable (C35 L48-67, C36 L1-7).

Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tipton to show a sensor located at the waste producing entity, and said sensor monitoring a waste component and generating monitoring data indicating when the waste producing entity requires waste management service, because Tipton already teaches monitoring expiration dates of chemicals, and activating alarms when necessary (C35 L48-67, C36 L1-7). A suggestion exists to

have a sensor (e.g. bar code reader) that monitors (i.e. reads data off chemical containers) the waste component and generates monitoring data (e.g. dialogue windows and alarms) because said sensor would notify users when certain chemicals are unusable, dangerous, and/or unstable (Tipton C35 L48-67, C36 L1-7 and Embutsu C6 L16-33).

Group F: claim 36

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach a first computer system configured to store waste component processing data associated with the waste components of the waste producing entity processed by the vendors (Appeal Brief p 17-19).

Examiner disagrees. Please see argument above under "Group A." Additionally, Tipton discloses a central receiving station (first computer system) monitoring movement of chemicals (storing waste processing data) to the eventual close monitored disposal of waste chemicals at a centralized disposal station (C18 L32-63). Furthermore, Embutsu teaches data input (waste processing data) into the memory of the terminal unit (first computer system) (figure 2, C5 L66-67, C6 L1-15).

Group G: claims 37-38

Appellant argues 1) there is no legally sufficient teaching, motivation, or suggestion to combine the references; and 2) Tipton does not teach the first computer system is configured to generate a consolidated financial statement relating to the waste management services provided by the vendors to the waste producing entity (Appeal Brief p 19-21).

Examiner disagrees. Please see argument above under "Group A." Additionally, Tipton discloses viewing and printing (generating) reports for any or all divisions and departments (C23 L64-67), and various reporting functions (C41 L 10-67). A suggestion exists to generate consolidated financial statements because said statements may indicate the total processing cost of waste chemicals for an institution, or the cost per division and department. Such statements are necessary to ensure the institution is financially viable (C1 L25-39, C2 L42-52).

Furthermore, Embutsu teaches calculating the collection cost (C8 L1-28). A suggestion exists to generate a consolidated financial statement because said statement shows the total cost to the vendor (e.g. the collection costs, number of trucks needed), and said vendor will expect payment for his services.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tipton to show a first computer system generating a consolidated financial statement relating to the waste management services because Tipton already teaches 1) lack of sufficient budgetary priority to developing waste management programs at educational institutions; and 2) the high cost of off-site treatments (C1 L25-39). A suggestion exists to generate a consolidated financial statement because said statement may show the savings/benefit of using a specific waste management service versus another service. Additionally, the financial statement provides the overall cost of using said waste management service to the waste producing entity, which helps to ensure the vendors receive payment for their services.

**(11) Related Proceeding(s) Appendix**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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